DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-015695
Date Inspected: 19-Jul-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Li Yang and Zhu Zhong Hai

CWI Present:	☑ Yes	☐ No		**Inspected CWI report:**	☐ Yes	☑ No	☐ N/A
Rod Oven in Use:	☑ Yes	☐ No	☐ N/A	**Electrode to specification:**	☑ Yes	☐ No	☐ N/A
Weld Procedures Followed:	☑ Yes	☐ No	☐ N/A	**Qualified Welders:**	☑ Yes	☐ No	☐ N/A
Verified Joint Fit-up:	☐ Yes	☑ No	☐ N/A	**Approved Drawings:**	☑ Yes	☐ No	☐ N/A
Approved WPS:	☑ Yes	☐ No	☐ N/A				
Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A				

Bridge No: 34-0006
Component: OBG Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 8AW, Segment 8BW and Segment 8CW

This QA Inspector performed visual inspection along with ZPMC QC Mr. Hu Mei Gang on the Suspender Bracket installed at Segment 8AW at Panel Points (PP) 62 and PP 64, Segment 8BW at Panel Point (PP) 66, Segment 8CW at Panel Point (PP) 68 and PP 70 and inspected the following.

Inspected cleanliness for blasting abrasive entrapped between the faying surface of suspender brackets to shim plate and between shim plates to Side Panel Corner Assembly for Suspender Brackets SB62W and SB64W, SB66W, SB68W and SB70W. All the suspender brackets are installed at Counter Weight side.

Verified the sung tightening of the bolts installed at the Suspender Bracket on a random basis and the results appeared to be in general compliance. Verified snug tightening for Suspender Brackets SB62W, SB64W, SB66W, SB68W and SB70W.

Please reference the pictures attached for more comprehensive details.

Segment 9BE

This QA Inspector performed Dimension Control Inspection along with ABF QA Inspector Mr. David Wu and ZPMC QC Mr. Zhang Hai Jung on the Splice plate installed at Lower Chevron from East and West side to ensure flatness is within the allowable tolerance of 2mm for Segment 9BE at Panel Point (PP) 76 at Cross Beam side, work point E4.

The QA Inspector measured the Flatness using 1(One) Meter Straight Edge and the results appeared to be in general compliance.

Segment 9CE

This QA Inspector performed Dimension Control Inspection along with ABF QA Inspector Mr. David Wu and ZPMC QC Mr. Zhang Hai Jung on the Splice plate installed at Lower Chevron from East and West side to ensure flatness is within the allowable tolerance of 2mm. Segment 9CE at Panel Point (PP) 77, PP 78 and PP 79 at Cross Beam and Bike Path side, work point E4 and E3.

The QA Inspector measured the Flatness using 1(One) Meter Straight Edge and the results appeared to be in general compliance.

Segment 9BW

This QA Inspector observed the in process fillet welding operation by the Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SSD25-PP075-183/184 and SSD25-PP075-135/136. The welder identification was 045280 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as the Partial Height Diaphragm at FL3 location.

Segment 9BW

This QA Inspector observed the in process fillet welding operation by the Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SSD25-PP075-143/144. The welder identification was 207456 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as the Partial Height Diaphragm at FL3 location.

Segment 9BW

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld process. The weld joint was designated as SSD25-PP075-118. The welder identification was 045280 and was observed welding in the 3F (Vertical) position using approved Welding Procedure Specification WPS-B-T-2133-B-U2-F. The piece mark was identified as the Partial Height Diaphragm at FL3 location.

Segment 9BW

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld process. The weld joint was designated as SSD25-PP075-117. The welder identification was 204756 and was observed welding in the 1F (Flat) position using approved Welding Procedure Specification WPS-B-T-2131-B-U2-F. The piece mark was identified as the Partial Height Diaphragm at FL3 location.

Segment 9BW

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld process. The weld joint was designated as SSD25-PP075-099 and SSD25-PP075-100. The welder identification was 204756 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-B-U2-F. The piece mark was identified as the Partial Height Diaphragm at FL3 location.

Segment 9AW to Segment 9BW

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBW9B-008. The welder identification was 066326 and 045196 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The Piece Mark was identified as the Bottom Panel transverse splice weld. Please reference the pictures attached for more comprehensive details.

Segment 9BE

This QA Inspector observed that the ZPMC personnel was performing final rotation of nut after snug tightening by pneumatic torque wrench, for the bolts installed at Side Panel T-Ribs for Segment 9BE between Panel Points (PP) 74 and PP 74.5 Cross Beam side. Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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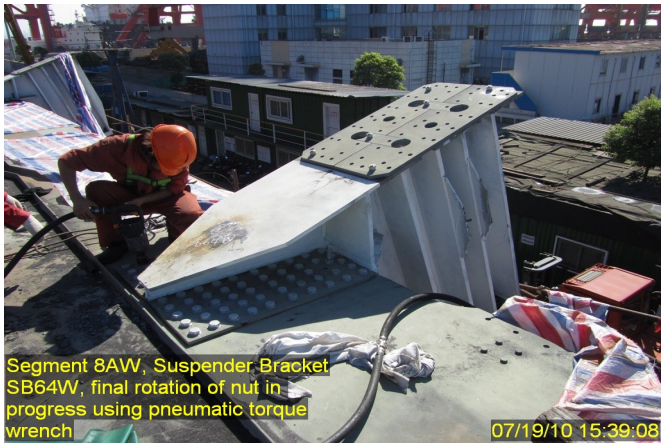

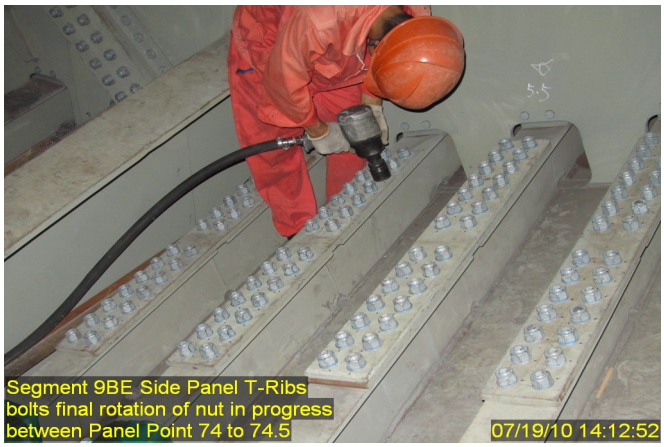

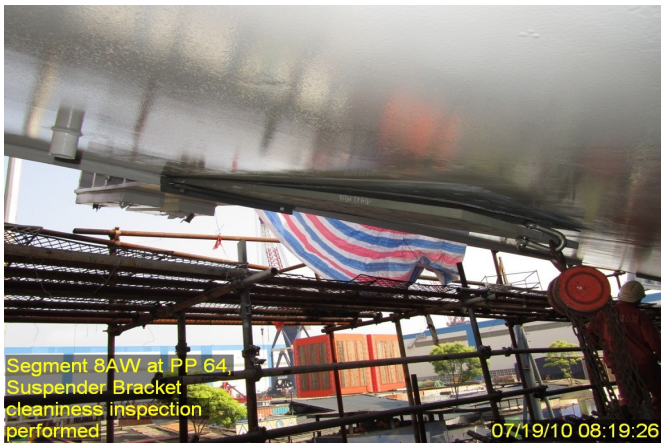

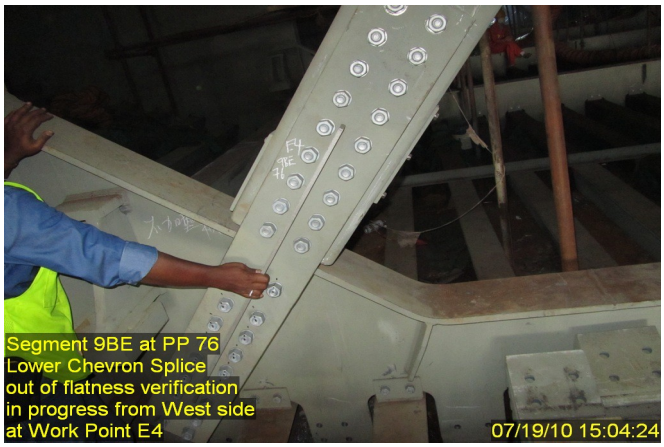

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer